



TPK-12.5-PV1500/3P/(S)

Power Surge Protector Type 1+2 / Class I+II For photovoltaic applications (PV SPD)

Plug-in format

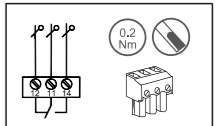
TPK-12.5-PV series of DC Surge Protective Device (SPD) for use in Photovoltaic applications. surge protective devices provide protection from lightning current and overvoltage surges in system from 500Vdc to 1500Vdc.

Providing power with photovoltaic solar panels is tremendously interesting in the context of renewable energy sources, as regards economical photovoltaic systems connected to the public electricity network. Because of their exposition, frequently in isolated sites and of the extended surface of photovoltaic systems (PV), lightning strikes are a major components in the risk to be assumed, both for the direct effect of lightning on the structures, and of the surge overvoltages on the installation. Cells are generally associated with inverters. We have developed a specific Din Rail product to protect DC side of cells and inverters against surge in power plant or residential application.

With the MOV (Metal Oxide Varistor), the overvoltage will be limited at the value of the voltage protection level of the TPK-12.5-PV surge protector. Our surge protector, as recommended in standards and guides, insure all protections (between + and-, + and Ground, - and Ground). On each surge arrester, as option, an available auxiliary contact will inform the end life status to ensure a maximum efficiency.

Application Photovoltaic systems
AC/DC distribution
Power supplies
Industrial automation
Telecommunications
Motor controls systems
PLC applications
Power transfer equipment
HVAC applications
UPS systems
Security systems
IT / Data centers
Medical equipment

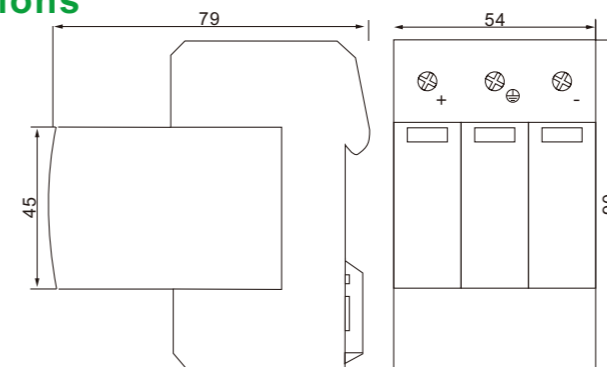
Features/Benefits
Easy installation or retrofit
Din-rail mountable
Fail-safe /self-protected design
Remote indicator (optional) with 3 pin NO/NC contact
IP20 finger-safe design
Visual indicator
Small foot print



Data sheet

Type	TPK-12.5-PV1500/3P/(S)
Technical Data	
Network configuration	Photovoltaic (PV)
Maximum continuous voltage (Uc)	1500Vdc
Type of SPD	Type 1+2 , class I+II
Lightning impulse current (10/350µs) (Iimp)	12.5kA
Nominal discharge current (8/20µs) (In)	30kA
Maximum discharge current (8/20µs) (Imax)	60kA
Voltage protection level (Up)	≤ 5.0kV
Response time (tA)	< 25ns
Thermal Protection	YES
Operating State/Fault Indication	Green (good) / Red (replace)
Degree of protection	IP 20
Insulating material / flammability class	PA66,UL94 V-0
Protective Elements	High Energy MOV
Temperature range	-40°C~+80°C
Altitude	13123 ft [4000m]
Conductor Cross Section (max)	35mm ² (Solid) / 25mm ² (Flexible)
Remote Contacts (S)	Optional
Format	Pluggable
Internal configuration	(Y)
For mounting on	DIN rail 35mm
Place of installation	indoor installation
Standard	IEC 61643-31

Dimensions



Internal configuration

